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GB 1341279

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GB 0716314

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(58) Field of search

A1E

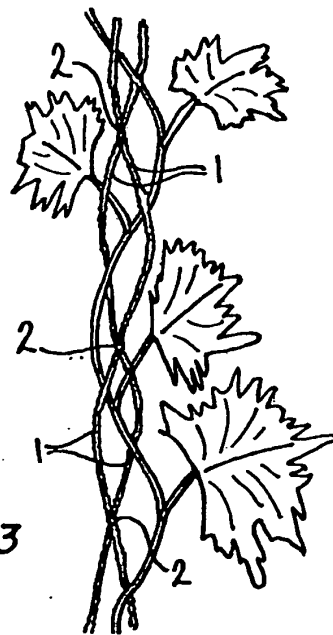
E2A

Selected US specifications from IPC sub-class A01G

(54) Plant support line

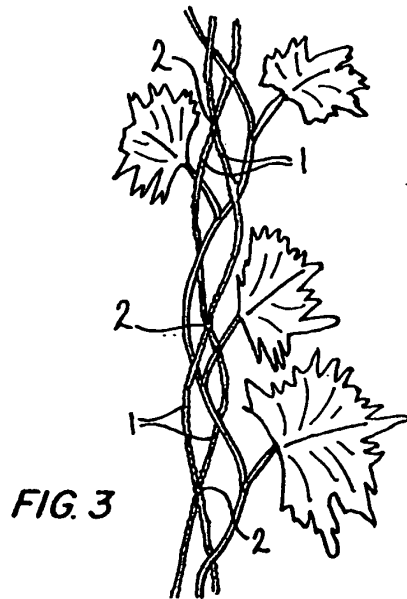
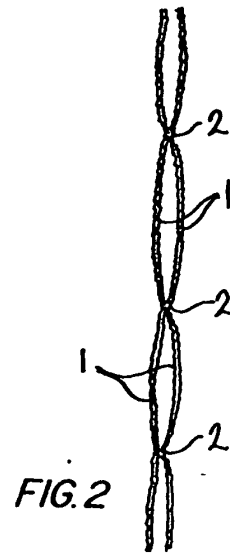
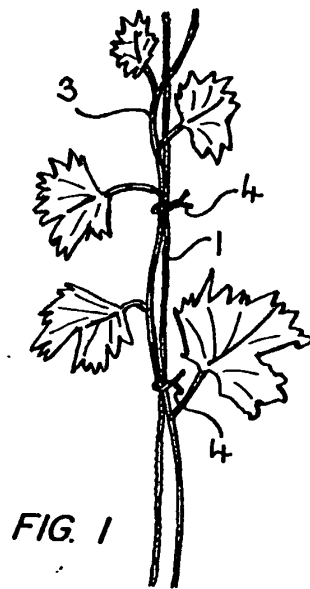
(57) The line comprises a series of loop regions 3 and a series of junction regions 2 arranged alternately along the length of the line. The line may be formed of a series of loops (e.g. cut from the legs of ladies' tights) which are joined together at the junction regions. It may also be formed of a pair of parallel strings which are knotted together at intervals, or by a pair of parallel plastics elements joined by a series of heat welds. The line can be used to support growing plants such as cucumbers and does away with the need for separate wire ties. The growing tips are gently inserted through the loops which expand as the plant grows, thus avoiding strangulation of the plant.

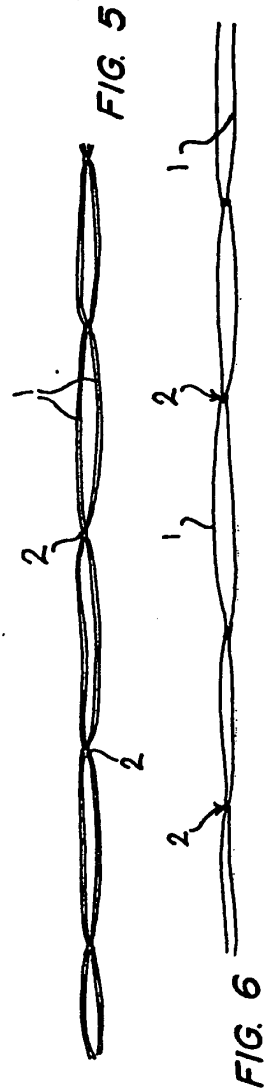
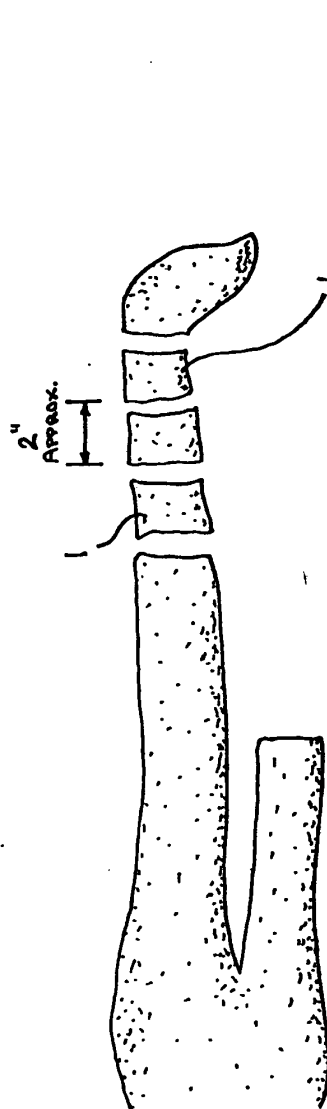
FIG. 3



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SPECIFICATION

Dual string

- 5 This invention relates to the devising of a Dual String that gives support to growing plants in an ordinary garden, greenhouse, orchard or vineyard.

- 10 Normally garden string or wire is used to support various varieties of growing plants i.e. cucumbers, tomatoes, runner beans, peas, raspberries, fruit trees, etc. Strings are stretched vertically horizontally, or in any other direction and the progressing shoot of the growing plant is attached to it by prepared clips or ties.

- 20 Securing the plant to the strings or wires is a very complicated task that requires great motivation, precision and knowledge as to how and where to fix the tie; often these plant ties become out of place as the plant grows and tend to strangle it or deter its growth.

- 25 According to the present invention — a Dual String for the job mentioned above, provides a solution to these plant growing problems. It consists of two parallel strings joined with a tie or knot at between six inch or twelve inch intervals. The thickness of the string and the length between junctions can be adapted to the requirements of the job; if the Dual String is to replace strong wire and to last a long time strong strings with unstretchable and imperishable nylon can be provided.

- 35 With Dual String the gardening task is similar to that described previously — it can be stretched vertically, horizontally or in any other direction, but the new growing shoots of the plant can be placed *gently* into the loops of the Dual String. The task is much easier to perform than applying clips or ties, and doubtlessly, the hold on the plant is less damaging and will give more freedom of growth; it is like holding a baby under the arms instead of by its neck! Releasing the plant can be easily done by cutting one of the strings.

- 40 To train various climbing plants up the walls the Dual String can replace complicated trelliswork previously thought necessary by just fixing two nails — one at the top and one at the bottom of the wall. The climbing plants can be shaped in various forms; it is possible to produce letters or write a message on large walls to be seen at a distance.

- 55 The Dual String can be produced on a small scale by cutting up ladies worn out nylon tights into circular strips across the legs, stretched to their full extent into long thin loops and joined together into a chain to make Dual String as described above. This chain is unstretchable and strong enough to give adequate holding power in a situation that does not require long term support for heavy plants.

- 65 Dual String can be produced in various

thicknesses and sizes in unstretchable and imperishable nylon on a large scale. Also unwoven unstretchable plastic fibres can be adapted for this purpose melting the plastic at intervals in fusion instead of using knots.

A specific embodiment of the invention will now be described by way of example, with reference to the accompanying drawing in which:

- 75 *Figure 1* shows the plant usually fixed to a string or wire; (1) with a stretched single string (3) and (4) plant fixture to string.

Figure 2 shows the Dual String stretched (1) parallel strings (2) its junctions

- 80 *Figure 3* shows the way the Dual String supports the plant (1) Dual Strings (2) Strings junction

- 85 *Figure 4* shows the way ordinary worn out ladies tights can be adapted for a Dual String (1) section of tights are cut and stretched into loops (2) chained at junctions.

Figure 5 shows Dual String manufactured from ordinary string (1) parallel running Strings (2) String junction or knots.

- 90 *Figure 6* shows how the ordinary non-spun fibre can be adapted to perform as a Dual String; (1) straight running non-spun plastic fibres (2) points at which the fibres are melted.

- 95 P.S. Re-use of worn out nylon tights provided me with the initial idea of the Dual String method.

CLAIMS

- 100 1. A flexible support line formed of a series of loop regions and a series of junction regions arranged alternately along the length of the line, the junction regions being very short in relation to the length of the loop regions, and each loop region comprising a pair of flexible elements of substantially equal length which are joined directly to each other at both adjacent junction regions but which are independent of each other along the remaining portion of their length, the arrangement being such that when the line is tensioned along its length the elements of each loop are drawn together into mutual contact so as to hold anything inserted between them.
- 115 2. A support line according to Claim 1, in which each loop region is formed from a separate closed loop, the separate loops being joined together at the junction regions during manufacture.
- 120 3. A support line according to Claim 2, in which the elements are of plastics.
4. A support line according to Claim 1 formed from a pair of elements which, during manufacture, are joined together at intervals to form the junction regions.
- 125 5. A support line according to Claim 4, in which the elements are lengths of string.
6. A support line according to Claim 4, in which the elements are of plastics.
- 130 7. A support line according to Claim 4, 5

or 6, in which the junction regions are formed by knotting the elements together.

8. A support line according to Claim 6, in which the junction regions are formed by heat
5 welding the elements together.

9. A support line substantially as described with reference to and/or as shown in the accompanying drawings.

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